THE COGNITIVE MODEL OF CRIME AND DELINQUENCY PREVENTION AND REHABILITATION:

II. INTERVENTION TECHNIQUES

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JULY, 1983

MINISTRY OF CORRECTIONAL SERVICES

PROVINCE OF ONTARIO

PLANNING AND SUPPORT SERVICES DIVISION

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July, 1983

ISBN-0-7743-8667-3

FOREWORD

This report is the result of a long-term collaboration between Dr. Ross and his colleagues, and this Ministry. The issue of modifying the behaviour of offenders has been a pressing problem throughout the decade of the seventies. At times, this issue flared into heated debate. Rather than enter into the emotional, albeit fruitless, exchange on either side of "the nothing works" debate, a more temperate approach was chosen. We were convinced that both sides of the argument had some merits. We were equally convinced that, in the heat of debate, the wrong questions were being discussed. From our perspective, the train of reasoning should have evolved along the line of:

a) if something does not appear to work, then why is this the case;

b) if something does appear to work, then what is the critical component that makes it work.

These questions have occupied much of our efforts since the mid-seventies. Dr. Ross and his colleagues have been prolific in their examination of the issues. Out of those various efforts emerged what is now called the Cognitive Model of Crime and Delinquency Prevention and Rehabilitation.

Currently, the Ministry is sponsoring Dr. Ross in further elaborations of the methodology of intervention. Our goals is to enter into a clinical trial in 1983/84. Further reports documenting the progress of these efforts will be forthcoming at the appropriate stages of development.

Caution is urged not to view our efforts as the naissance of another panacea. The target group has been tightly defined, and the intervention strategies are being carefully tailored to suit that group. It is not perceived that all correctional clients will need, or benefit from these interventions.

Given the long history and the voluminous nature of this work, no one monograph serves as a full compendium of the cognitive model. Bob Ross and Liz Fabiano plan to produce, in the near future, a book that will serve this purpose. For interested readers, the proposed title of this book is "Straight Thinking": The Cognitive Model of Crime and Delinquency Prevention and Rehabilitation.

One final comment is required. The cognitive model is just that, a model. Ultimately, the validity of a model is an empirical question. Much time, effort and resources will be required to establish the validity and the limiting factors of this particular model. Nonetheless, the model is though provoking.

A.C. Birkenmayer
July, 1983.

ACKNOWLEDGEMENTS

Andy Birkenmayer stimulated our initial interest in examining the cognitive functioning of offenders. We appreciate his advice and his unfailing encouragement of our research.

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INTRODUCTION

Success is a rare commodity in corrections. There is very little evidence that correctional programs reduce recidivism, that rehabilitation programs rehabilitate, that corrections corrects. During the past twenty years, audits of correctional program outcome have almost uniformly concluded that the efforts of correctional practitioners have achieved very little in terms of the prevention of crime or the rehabilitation of offenders. Although some correctional researchers have rejected these conclusions, the view is widespread that many, perhaps most correctional programs have failed. In fact, rather than rehabilitating offenders, some programs have significantly and dramatically increased recidivism (Romig, 1978; Ross & McKay, 1976). However, there are some effective programs. There are some programs which have been highly successful in rehabilitating offenders, yielding reductions of 30% to 60% in recidivism for follow-up periods as long as fifteen years after program completion (Ross & Gendreau, 1980).

One factor which differentiates effective from ineffective correctional programs is the explanation of criminal behaviour on which the program is based. Program strategies

which derive from inadequate or faulty conceptualizations of the causes of criminal behaviour are unlikely to have much impact in reducing such behaviour. Many correctional programs were based on the medical/disease model which viewed criminal behaviour as symptomatic of some underlying psychopathological condition which required "cure" through various forms of "therapy". There is no evidence for the effectiveness of such programs. Though popular, the outcome of programs based on a punishment or deterrence model have been far from encouraging (Gendreau & Ross, 1980). Explanatory models which stress the influence of poverty, unemployment, social class, culture conflict and the like, may address the root causes of crime, but have yielded few cost-effective programs of crime prevention or offender rehabilitation. The "actuarial model" (Ross, 1983) which proposed that the prime concerns of correctic s should be costs and humane containment, has become less defensible as unabated recidivism rates create exorbitant demands on facilities and budgets.

Whereas many ineffective programs have been based on inadequate conceptual models, most are based on no model at all. Corrections appears to be functioning in a "conceptual vacuum". There is an almost total dearth of conceptualizations of the causes of criminal behaviour which are supported by adequate empirical evidence and which can suggest intervention strategies for correctional agencies which are both practical and effective.

THE COGNITIVE MODEL

A model which appears to have considerable potential both as an explanation of criminal behaviour and as a source of ideas for correctional programming is the cognitive model (Ross & Fabiano, 1981). Briefly, this model suggests that criminal behaviour may be associated with developmental delays in the acquisition of a number of cognitive skills which are essential to social adaptation. Many offenders have deficits in such cognitive functions as social perspective-taking, means-end reasoning, and interpersonal problem-solving. They are less likely to think about problem situations than to react to them, tending to "act-out" without adequately analyzing situations, calculating the consequences of their behaviour, or considering alternative courses of action. These characteristics are not merely matters of temperament or personality; they reflect fundamental deficits in those cognitive abilities which are essential for effective social functioning. Such cognitive deficits may repeatedly lead the individual into social difficulties and may place him at risk for a criminal adjustment.

Support for a conceptualization of criminal behaviour in terms of cognitive deficits was provided by the results of a comprehensive review of the research literature on the relationship between cognition and crime (Ross & Fabiano, 1981). This review identified a considerable body of empirical research which demonstrated that deficits in cognitive skills

are associated with the development of social deviation of various forms, including crime and delinquency.[1]

COGNITIVE INTERVENTION

Much stronger support for the cognitive model was found in an analysis of programs which have been found to be effective in reducing the recidivism of adolescent and adult offenders. The analysis revealed that a common component of almost every one of these effective programs was an intervention strategy which could lead to cognitive development or the enhancement of the offender's interpersonal problem-solving skills (Ross & Fabiano, 1981). Consistent with the model, many programs which have been effective in reducing the recidivism of juvenile or adult offenders have incorporated techniques which could enhance the offenders' impulse control, broaden their view of the world, improve their ability to comprehend the thoughts and feelings of other people, increase their reasoning skills and their interpersonal problem-solving skills, and could help them to develop alternative interpretations of their social environment.

More recent research has demonstrated that effective correctional programs can be reliably differentiated from ineffective programs on the basis of the presence or absence of specific cognitive training components in the program (Ross & Fabiano, 1982). A differential component analysis of twenty-five effective and twenty-five ineffective programs revealed that successful correctional programming was significantly associated with cognitive intervention techniques.

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[1]This does not deny the fact that many perfectly rational men break the law for perfectly rational reasons.

The foregoing suggests that the remediation of cognitive deficits may be a critical factor in the rehabilitation of a large proportion of the delinquent and adult offender population. However, further research is required before cognitive training can be fully endorsed. The cognitive training techniques which have been identified as components in effective correctional programs are remarkably varied. In many instances program developers have included a cognitive training component in their treatment package without being aware that they were doing so, i.e. the component was included for reasons other than enhancing the offender's cognitive skills. Moreover, few programs included a comprehensive cognitive training package; most provided only one of the many cognitive techniques and included this technique only as one aspect of a multi-facetted program which provided many other non-cognitive techniques. In most instances, the cognitive training element involved could be expected to affect only a few of the many deficits which offenders may evidence - there were few multi-modal cognitive programs.

The potential of cognitive training for crime prevention and offender rehabilitation needs to be carefully examined in experimental studies in which multi-facetted cognitive training is a primary treatment component and not merely an adjunct to other strategies. Research is also needed to determine which types of offenders are most likely to benefit from cognitive training. Moreover, the value of specific training techniques for particular types of offenders

and specific types of correctional settings needs to be systematically explored.[2]

It would seem reasonable to assume that if the inclusion of a cognitive training component is associated with a positive program outcome, that program outcome might be maximized if programs were developed which included a variety of cognitive training components designed to enhance the participant's functioning on a number of cognitive skills. Whereas it may be possible to develop one cognitive training procedure which could improve the offender's cognitive skills in general, it seems more likely that specific procedures may be required in order to assure that each of the various cognitive deficits are addressed by the program. Considering the variety of cognitive functions which may be impaired, it would seem reasonable to suggest that an equal variety of cognitive training techniques should be incorporated into correctional programs.

The present report identifies a number of intervention techniques which could be employed in correctional programs to foster the offender's cognitive development. Some of the techniques have been incorporated in previous programs with offenders. In these instances we describe the applications and discuss the available evidence of the program's effects. Other techniques have seldom been used in corrections although

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[2]The Ministry plans to conduct research on these questions in studies with high-risk adult probationers and institutionalized adult offenders.

they appear to have considerable promise for this field. The advantages and disadvantages of these techniques for corrections are discussed, and suggestions are made as to how they might best be modified to suit offender clients and/or correctional settings.

The list of programs we recommend is not intended to be exhaustive. We have selected from the extensive literature on cognitive development programs, cognitive therapy, and cognitive behaviour modification only those programs which we feel have particular merit for offenders. We do not propose that any correctional agent attempt to implement all of the programs. Rather we suggest an eclectic approach in which he selects from the following those which best suit his needs and the characteristics of the offenders to be involved and the setting (e.g. probation vs. institution) in which the program is to be implemented.

It will become clear to the reader that cognitive training techniques are by no means esoteric. One of the virtues of the cognitive model is that it suggests that correctional intervention can, and should be, a multi-disciplinary activity. The cognitive techniques which we recommend are derived from many disciplines: education, child development, cognitive psychology, clinical psychology, psychiatry, and philosophy.

The cognitive model suggests that the offender needs training, not therapy. He needs to learn not only social skills and vocational skills, but thinking skills, problem-

solving skills, and decision-making skills. He needs to learn general strategies for recognizing problems, analyzing them, and conceiving and considering alternative non-criminal solutions to them. He needs to learn to calculate the consequences of his reactions to problems. He needs to develop his social perspective: to go beyond an egocentric view of the world by developing the ability to take the perspective of other people and the ability to distinguish between his own emotional states, thoughts and views and those of other people. In short, the cognitive model suggests that correctional programs should be designed to engender the offender's cognitive development, improve his interpersonal cognitive problem-solving skills, and broaden his social perspective.

COGNITION AND THE LAW

It should not be thought that cognitive training is a totally new approach in correctional treatment or that it is a radical departure from previous programs. On the contrary, the modification of the offender's thinking is an implicit goal of all correctional programs which attempt to influence the offender by providing negative consequences for his anti-social behaviour. Indeed, one of the fundamental purposes of the criminal law is to make people think. However, the cognitive model suggests that there are many offenders whose cognitive deficits are such that their anti-social behaviour is unlikely to be constrained by the criminal law, who are unlikely to be deterred by threats of penalties, and who are unlikely to learn from their exposure to the sanctions of the criminal justice system. This is not to suggest that such

sanctions are not necessary but only that they are not sufficient for many offenders - perhaps the very ones for whom they are most needed - the ones who fail to consider the consequences of their behaviour before they act. The criminal justice system by its emphasis on punishing anti-social behaviour may well create situations for improving the thinking of offenders but it fails to provide the technology whereby such learning might occur in those offenders whose cognitive skills are not well developed. Moreover, many offenders need to learn to think not only about the legal consequences of their behaviour, but also about the social consequences of their behaviour. More than laws are required to constrain anti-social behaviour.

COGNITION AND TRADITIONAL THERAPIES

It would seem to follow that if offenders have deficits in cognitive functioning, which make them likely to continue in criminal behaviour, then correctional programs which remediate such deficits would reduce recidivism. However, this is a gross oversimplification of the complexity of correctional rehabilitation. Whereas enhancing an offender's cognitive development may be a worthwhile goal in its own rights, it should not be assumed that simply remediating his cognitive deficits will eventuate his rehabilitation. It is considered unlikely that limiting intervention programs to cognitive training alone would be sufficient to effect change in criminal behaviour.

Some suggestive evidence in support of this view is the fact that programs which have provided only cognitive skills training have yielded improvements in cognitive functioning, but have not influenced social adjustment, institutional adjustment, or recidivism (Atrops, 1979; Daravanis, 1978; Lewis, 1974; Perrotti, 1978). Accordingly, one might suggest that cognitive training is essential but not in itself sufficient to change criminal behaviour.

Emphasizing the cognitive deficits evidenced by many offenders does not mean that these offenders do not have other problems which need to be addressed. Moreover, cognitive deficits are likely to be exhibited by many, but not all offenders. Offenders are not a homogeneous group. While some may have cognitive deficits, others may have other deficits. Attention must also be paid to other social/economic factors in the offender's environment which may significantly influence the offender's behaviour. As research has indicated, effective correctional programs do not rely on a single method. On the contrary, they are multi-facetted programs which employ a variety of techniques, appropriate to the complexity of criminal behaviour. A cognitive development component may be an essential aspect of effective programs, but cognitive development alone is no panacea.

It would be folly to think that a cognitive training program would be sufficient to yield the rehabilitation of an offender whose lack of social or vocational skills would prevent him from adapting in the post-treatment environment.

Concern for such non-cognitive factors must be part of an adequate program - cognitive training alone is no cure-all. However, some of these problems may be a consequence of the offender's inadequate cognitive skills and improvement in his cognitive skills may help him to cope better with adverse circumstances which he cannot otherwise change. Similarly, offenders who are experiencing emotional problems may require additional forms of therapy but many of their emotional problems may well be ameliorated by cognitive restructuring techniques.

A cognitive approach to correctional programming does not preclude the possibility or the advisability of the correctional agent using a wide variety of other counselling approaches. Offenders are complex; they need multi-facetted programs. In fact, cognitive training does not represent a radical departure from more traditional correctional counselling programs. Almost all counselling approaches or psychotherapies place some emphasis on having the client understand how his thinking and attitudes influence his behaviour (cf.Egan, 1975). Several of the treatment programs which have been most popular with offenders have a strong cognitive component. Perhaps the most obvious of these is *Transactional Analysis* in which considerable emphasis is placed on helping the offender to understand how his behaviour is influenced by ego states (parent, adult, child), by life scripts, and by games, all of which are essentially cognitive processes or patterned systems of thought which influence, limit or control the offender's life goals, his view of himself, his decision-

making and his interactions with other people. One of the major goals of *T.A.* is to help the offender to become aware of and thereby to be able to free himself from such restricting, manipulative and self-defeating cognitive patterns. A cognitive training component is also central to what has been perhaps the most popular of all correctional treatment - *Reality Therapy*. *Reality Therapy* emphasizes consequential thinking: teaching the offender to consider the consequences of his behaviour before he acts.

Unfortunately, adequately controlled studies demonstrating the effectiveness of *T.A.*, *Reality Therapy* , and other traditional therapies which have been used with offenders are not plentiful. Although there are many reports of the success of *Reality Therapy* with delinquents, most are based on inadequate evaluation research (Glasser, 1965; Shea, 1974; Williams, 1976). A study of *T.A.* by Jesness (1975) found that parole revocation rates for treated institutionalized youths were less than rates for other institutions and less than the rate in the same institution prior to the introduction of *T.A.*. *T.A.* and *Reality Therapy* have been among the components of several multi-facetted correctional programs which have been found to be effective in well-controlled studies (e.g. Platt, Perry & Metzger, 1980; Kloss, 1978, Quay & Love, 1977). It is tempting to conjecture about the degree to which the positive outcome of these programs is attributable to the cognitive aspect of treatment. However, that determination requires further research. At this point it does seem reasonable to suggest that the cognitive model is not incompatible with *T.A.*

Reality Therapy or any other therapy which has programmatic features which are likely to engender the offender's cognitive development. Although the cognitive deficits which we have identified among offenders require, in our view, a more comprehensive and direct program of cognitive training, some of the basic approaches of these other therapies could readily be included in a cognitive program. Conversely, a cognitive training program could readily be provided within the format of other correctional programs.

On the other hand, we must point out that there are several ways in which programs based on the cognitive model will differ from more traditional correctional intervention approaches. Traditional programs, including those with a strong cognitive component, generally seem to assume that offenders have the requisite skills to profit from interventions designed to make them think. The cognitive model, in contrast, suggests that the problem with many offenders is not that they have not been thinking, rather it is that they have not acquired the skills of thinking. No matter how persuasively it is attempted, encouraging them to think will achieve little if they are not first taught <u>how</u> to think.

DIFFERENTIAL TREATMENT

A key concept in effective correctional programming is the principle of differential treatment. Offenders are not all alike. Different offenders require different programs depending on their characteristics, the setting in which treatment is to be provided, the characteristics of the correctional agent, and the goal of intervention. Cognitive programs pre-

sent no exception to the differential treatment rule. Although it is too early in the development of the cognitive model to be able to specify which types of offenders would be best served by which of the many cognitive programs, it is suggested that prior to intervention, the offender's specific cognitive deficits be assessed in order to ensure that the training program selected for him will address his needs. In describing the following cognitive programs, we have, wherever possible, indicated the specific deficit for which the program appears appropriate. We strongly recommend that experimental cognitive intervention programs be designed such that they can yield information about the relationship between offender type (including specific cognitive deficit), program characteristics, and outcome.

An important precursor to such studies has been research on the *I-Level* (interpersonal maturity) classification system for juvenile offenders (Frank & Quinlan, 1976; Palmer, 1968, 1973; Price, 1978; Warren, 1966). This system differentiates delinquents on the basis of the level they have reached in their perception of the world, their understanding of complex interactions among people, their ability to consider alternative behaviours, and their ability to make sound judgements. In effect, *I-Level* assesses the offender in terms of his cognitive maturity and then recommends a program for the offender appropriate to his maturity level. With the most immature individuals, the aim is to teach them to perceive more accurately and to respond more appropriately to the demands of society and its institutions. Goals for those at the next

level include: training in social perception and role-taking skills and changing their delinquent orientation. The program for the most mature group is aimed at resolving conflict through more traditional therapy techniques. Treatment at the lowest level of maturity provides training in rudimentary role-taking skills while the treatment programs for the next two levels provide consistent and accurate information about the adult world, peers, and one's own self (training in interpersonal sensitivity and accuracy of self-appraisal). The system aims to gradually increase the focus on more complex interpersonal cognitive skills.

Two studies based on the *I-Level* system have found significant benefits in terms of reductions in illegal behaviour. In one study, probationers randomly assigned to an *I-Level* program evidenced significantly less delinquency than control groups (Barkwell, 1980). The other study, the large-scale, 12-year Community Treatment Project (Palmer, 1980; Warren, 1979), has been criticized on methodological grounds, but it does provide some evidence of the efficacy of *I-Level* programming with delinquents. It highlights the fact that program outcome is heavily dependent on the type of offenders involved and that cognitive factors are of importance in establishing type.

Questions have been raised about the validity of the *I-Level* system (Austin, 1975; Zaidel, 1973). Moreover, doubts have been raised about both the theoretical rationale of the system and the justification for relating the treatment

strategy to *I-Level* classification (e.g. Gottfredson, 1972). For these reasons, and because we consider the *I-Level* assessment devices cumbersome and overly subjective, we cannot include it in our list of recommended cognitive programs. It is our view that more objective assessment procedures should be employed in cognitive programs (Ross & Fabiano, 1983). If differential treatment principles are to be followed, we consider it essential that classification of the offenders should be based on a system which more clearly pinpoints the offender's cognitive deficits than is done in the *I-Level* system. Considerably more research is required before confidence can be expressed about the adequacy of the matching between treatment and classification both for *I-Level* and for the system we hope will be developed for the cognitive model.

CORRECTIONAL COGNITIVE INTERVENTION PROGRAMS & TECHNIQUES

In this section, we identify a number of correctional programs which have been used in institutional and/or community settings with offenders. The programs differ in their underlying principles and goals and in their techniques, but each focusses on the cognitive functioning of their offender clients. In the following section we present cognitive programs and techniques which have not been used extensively with offenders but which have, in our view, considerable value for them.

THRESHOLDS

The *Thresholds* program (Burglass, 1970) has been provided in correctional institutions and probation settings throughout the U.S.. The program is based on the following assumption:

> Criminal behaviour can be thought of as one manifestation of a functional deficit in decision-making ability and problem-solving skills which leads to and derives from an image of the self as a victim (Burglass, 1970, p.1).

It is noted that offenders often seek to excuse themselves of their anti-social acts by presenting an image of themselves as "victims". In *Thresholds* the view is taken that by portraying himself as a victim, the offender is actually accusing himself of being helpless and of being unable to decide how to behave on the basis of his own reasoning - as

though he were powerless to make decisions. *Thresholds* aims to help the offender realize that he is not a mere victim of his circumstances, his background or luck, but that he is a self-determined individual who is personally responsible for what happens to himself - he is the one who decides what happens, not fate. The program aims to teach the offender how to make better personal decisions following a seven step procedure: (1) defining the situation, (2) formulating a set of possibilities, (3) evaluating these possibilities, (4) applying a decisional criterion to determine which decision is best, (5) reaching the decision, (6) enacting the decision, and (7) ratifying the decision taken. The program does not attempt to teach the offender the right decision. The emphasis is placed on the process, not the content of the decision; not what to decide but how to decide, how to solve problems in a more rational and responsible manner.

The program is presented in 21 group or one-to-one sessions. The individual sessions are broken into 2 units - a teaching unit and a dialogue unit. The teaching unit consists of a 2-hour session during which one step in the decisional process is presented. The dialogue unit then relates the lesson presented to life situations. Role-playing, art forms, values clarification, and problem-solving are included in the program.

Encouraging results have been found with *Thresholds* in a study of prisoners at the Delaware County Prison. During a two-year follow-up, 80% of the prisoners who completed the

program had not been convicted of an offence (DeLong, 1978). Unfortunately, no control group was included and it is not possible to assess the significance of these findings. However, it appears that teaching decision-making skills to offenders using the *Thresholds* approach may aid their problem-solving skills, help them to view their past behaviour in a new and more constructive manner and help make them aware of alternatives to their accustomed thinking and behaviour.

SOCS

Another program which has been used to improve the problem-solving skills of offenders is the *SOCS* program (Situation, Option, Consequences, Simulation). This program, like *Thresholds* and other cognitive programs, aims to teach offenders that they are responsible for their own behaviour, that they engender the consequences of their behaviour themselves by the decisions they make and by the way they attempt to resolve problems. It is suggested that when offenders are faced with a conflict they tend to either conform, retreat, or rebel. Conforming typically only postpones the real interpersonal conflict whereas retreating or rebelling often takes the form of deviant behaviours which lead to difficulties with the law. *SOCS* aims to teach offenders a fourth alternative by which they can resolve conflicts without alienating or antagonizing other people: negotiation. Teaching negotiation skills is, essentially, teaching problem-solving: the *SOCS* technique teaches the offender: (1) how to identify and clarify the problem situation; (2) how to identify options (possible responses); (3) how to identify consequences of the various

options; and (4) simulation - behavioural rehearsal of the options in order to obtain the desired consequences (Roosa, 1971). Training relies heavily on modelling, practice, and feedback.

SOCS has been shown to be an effective way of teaching negotiation skills in studies of two groups of pre-delinquent adolescents (Lewis, 1974). An immediate and substantial increase in performance was found under the training conditions and performance of the behaviours increased across twenty-five different conflict situations. The students were found to have performed the behaviours with a variety of strangers, and a parent questionnaire indicated that the youths had modified their reaction to conflict situations in the home (Lewis, 1974).

BEHAVIOURAL CONTRACTING

There are, of course, a number of other techniques that can be used to help offenders learn effective problem-solving strategies for conflict situations. *Negotiation skills training* has been provided for delinquents and their parents and for teachers, supervisors, and detention home personnel by Patterson (1972) and Stuart (1971). Their approach, however, involved having therapists arbitrate specific agreements for the youth. Whereas such a procedure might help the youth with the particular conflict, it is doubtful whether it would enable them to learn the skills necessary to negotiate for themselves in other situations.

Negotiation skills training is an integral part of *behavioural contracting* programs which have become increasingly popular in

correctional settings. There is accumulating evidence of their value (Cohen & Filipczak, 1971; Jesness, Allison, Wedge & Young, 1975; Patterson, 1974; Stumphauser, 1973; Tharp & Wetzel, 1969). An important aspect of such programs is teaching the participants the importance of clear communication and compromise in interpersonal relations and the value of establishing clearly stated rules and consequences for interpersonal behaviour. *Contingency contracting*, in effect can be viewed not only as a method of controlling offenders but as a method of teaching negotiation as an interpersonal problem-solving skill. Such training may help the offender to be sensitive to the needs and perceptions of other people and to recognize the interpersonal consequences of his behaviour.

In *behaviour contracting*, however, *negotiation skills training* is usually only implicit rather than the focus of the program. We suggest that if negotiation skills are important to offenders (and we think they are), then explicit and direct training in these skills should be provided as is done in *SOCS*.

There is some evidence of the value of *negotiation skills* training in terms of reduction in recidivism. Thus, Wade, Morton, Lind, & Ferris (1977) demonstrated how male and female adolescents can be successfully diverted from the juvenile justice system by involving their family immediately after the first court referral in a cost-effective short-term treatment program, which taught the family members how to negotiate with each other. Compared to a recidivism rate of approximately 70% for such adolescents before the program, during the first year of the program 76% of the 47 first

offender adolescents did not recidivate. During the second year, 83% of adolescents in eighty-four families did not recidivate. At a one year follow-up only 10% of the treated first offenders recidivated. Moreover, no siblings of treated first offenders appeared in juvenile court.

The exemplary family therapy program of Alexander & Parsons used an intensive multi-modal approach in which parents were trained in negotiation techniques and in various other interpersonal skills. In a 6 to 16 month follow-up study with 86 families, recidivism rates for the Alexander & Parsons' program ranged from 21% to 47% less than for other treatment groups, no treatment controls, and county-wide recidivism rates (Alexander, Barton, Schiaro, & Parsons, 1976; Alexander & Parsons, 1973). Similarly, Maskin (1976) found significant decreases in recidivism for a group of incarcerated adolescent offenders who were trained in interpersonal problem-solving skills. Their recidivism was 2%, while the rate for matched controls was 20%.

DIRECT DECISION THERAPY

Direct Decision Therapy (*D.D.T.*) is another cognitive approach which focusses on the offender's decision-making. It is a system which helps the offender to become aware of the choices he has made in solving particular problems and the consequences (positive and negative) of those choices. The system is designed to help offenders to learn to solve future problems by themselves by having them examine the decision-making process they have gone through which led to their current problems. *D.D.T.* entails a series of seven steps or

operations:

1) defining and delineating the problem as clearly as possible,

2) examining past decisions which were instrumental in creating the problem,

3) listing the payoffs for those past decisions which created the problem,

4) determining the context within which the original decision was made,

5) examining alternatives to past decisions,

6) selecting an alternative and making a committment to enact it consistently,

7) supporting and rewarding oneself for the implementation of the new decision.

The therapist's task is to help the offender to understand the decisions he has made that led to his present behaviour, and then to help him make a decision to change his behaviour and, finally, to help him carry out the decision. He is helped to become aware of his decision-making process, taught to compare payoffs and negative consequences of his former and his new decision, and reminded that he must re-affirm his new decision frequently.

This system was found to lead to a reduction in the aggressive behaviour of male juvenile delinquents in a training school in California. Diminution of aggression occurred after a very few sessions. However, the evaluation of the program was less than stringent. Greenwald (1973) has described the use of *D.D.T.* (an interesting acronym!) with sex offenders - exhibitionists, rapists, and voyeurs. In such cases, *D.D.T.* can serve to help the sex offender to become aware of the payoffs for his decision to behave deviantly, particularly the non-

sexual payoffs (e.g. anger expression) and to help him realize how he can decide to achieve these payoffs by non-deviant means.

One of the major advantages of this system is its emphasis on the offender's self-determinism and his responsibility for his own behaviour. As in the case of most cognitive programs, offenders are treated not as passive victims but as active decision-makers (ones who need to learn to make decisions more effectively).

GUIDES TO BETTER LIVING

A cognitive training program which has been used in many prisons and detention centres throughout the U.S. and in Australia and Canada is the *Guides to Better Living* course developed by Woodward and Chivers (1976). The course is designed to help offenders realize that they are responsible for their own attitudes and behaviour, and are not merely pawns of social circumstances. The course consists of some didactic presentations, but is primarily conducted through discussion groups. It begins by teaching the offender/students how other people think - how other people use principles and ideas to achieve their goals; how others reason their way through problems and how they profit from thinking and from a rational approach to behaviour. It seeks to teach the offender not only about the importance of thinking, but actually aims to teach him how to think by describing how others think effectively. It also stimulates and challenges the offender's thinking by the use of puzzles and mind games. Throughout the course emphasis is placed on teaching that there are success

patterns which can be acquired which are a combination of principles and actions. These include self-discipline; accurate thinking; controlled attention; learning from failure; and thinking about a variety of possible solutions to problem situations ("creative vision"). The puzzles and games are used to teach the offender that there is no quick universal answer to most problems and that he must consider alternatives. Particular emphasis is placed on teaching him that he can benefit (and not just be threatened by) acknowledging that other viewpoints also have validity and value. The course, therefore, is designed to combat the offender's egocentric thinking.

There have been a number of studies on the effectiveness of this program. In a two year follow-up of 800 graduates of the program at two prisons in the U.S. only 17% had been reinstitutionalized. This compared favourably with the 49% rate of reinstitutionalization for offenders at other institutions which had not been provided with the program. Moreover, the disciplinary infractions for program participants declined by 80%. Unfortunately, no data are presented for non-participants. Another study in a pre-release centre revealed a 12% failure rate in a six-month follow-up compared with "national averages of over 50%". The foregoing research is encouraging if not conclusive.

NEW CAREERS

Teaching problem-solving techniques is also a component of the *New Careers Development Project* (Grant, & Grant, 1967). This project is designed in part, to demonstrate that indivi-

duals who have had problems (e.g. ex-offenders) can be helped to overcome that problem and can help others (other offenders) to overcome their problems by having the former work as non-professionals in positions in which they assist the latter. In teaching the ex-offenders how to help their offender clients, a training program is provided which teaches problem-solving: problem-defining; fact-finding procedures; synthesizing findings; preparing plans of action.

An 8 to 10-year follow-up study of parolees who had extensive records prior to incarceration in a state prison found that New Career graduates had significantly better outcome within two years after release than untreated controls. However, at a later time these differences were no longer significant although the New Careerists did spend 50% less time incarcerated than comparison subjects.

The problem-solving training component of *New Careers* is much more limited than that provided in other cognitive training programs in corrections. However, *New Careers* provides such training in a context which seems to have merits: the offenders are treated not merely as clients but as "therapists". The mobilization of the offender's peers as prosocial and active change agents is a common component of effective correctional programs (Gendreau & Ross, 1979). It may be particularly useful as a means of motivating offenders to involve themselves in cognitive training programs.

UVIC

A program that accords well with the cognitive model is the program provided by the *University of Victoria* (UVIC) at a

number of penitentiaries in British Columbia. Formally an educational program which offers prisoners university-level courses in the humanities and social sciences, *UVIC* actually is a multi-facetted program which incorporates many procedures such as the helper-therapist principle, which can foster cognitive change (Ross, 1980). The prisoner/students enter the program as students but later may become tutors for their fellow inmates or assistants to the university faculty. By persuading them to assume such roles the program re-labels the prisoners as students and educators rather than criminals. It does so, not through coercion, but in a manner sufficiently subtle that they do not attribute their changed behaviour to some external force (like a parole hearing) and they begin to view themselves as individuals who value such behaviour, i.e., they become committed to prosocial behaviour by advocating it (e.g. Bem, 1967). Reinforcement of such behaviour in *UVIC* may well encourage the acquisition of anti-criminal attitudinal and cognitive patterns such that alternatives to crime come to be perceived as positive and worthy (cf. Andrews & Kiessling, 1980).

Cognitive development also is engendered in *UVIC* through modelling. The *UVIC* program exposes the offenders to many individuals (professors, graduate students and prisoner/teachers) who model prosocial behaviours and attitudes, and adaptive interpersonal skills.

> "People learn not only by acting and experiencing the consequences of their actions, but also by observing others, by imitating models by watching television, by seeing a demonstration, by discussing issues, even by listening to a lecture, sometimes without practice, without reinforcement and without overt action" (Duguid, 1980, p.17) .

Cognitive development may also be engendered for the *UVIC* students by their study of the humanities which may enhance their social perspective-taking ability. This possibility is made more likely by the method of teaching which consists primarily of intensive small group discussions in which the student's view on many social issues is continually challenged by his peers and the faculty. Through such exchanges the students learn to sharpen their thinking and communication skills, acquire the realization that there are alternative ways of viewing social and interpersonal problems and issues, and that their egocentric view is not necessarily the best one.

Methodological problems prohibit unqualified endorsement of the extraordinary results of the *UVIC* program (14% recidivism among its multi-recidivistic adult offenders). However, their program approach epitomizes most of the principles of effective correctional treatment and accords well within the principles of the cognitive model. Aspects of its educational format, particularly its use of group discussions on social issues could be readily adopted in many correctional settings at various educational levels.

INSTRUMENTAL ENRICHMENT

Instrumental Enrichment is an educational program developed in Israel over the past twenty years by Reuven Feuerstein. Criminals, according to Feuerstein (1980) come to apply a different set of meanings to the world because they do not process information in the same manner. They may not see, or

attend to certain events, or to certain characteristics of a situation. They may not have the required set of categories (meanings) in their mind by which to identify things when they see them. They may not seek the kind of detailed information they need to have in order to behave appropriately in a given situation. They may respond to inappropriate cues, and ignore important ones. Even if capable of gathering the necessary information and assigning appropriate meanings, they may not have the skills required to provide suitable responses to situations.

Instrumental Enrichment is designed to provide remediation of such deficits at three levels, called input (problems of gathering information), elaboration (applying meaning), and output (responding). A number of instruments have been developed which contain exercises to teach such functions as visual scanning, visual comparison, visual discrimination, hypothesis testing, planning, spatial orientation, categorization, divergent thinking, hypothetical thinking, and systematic observation, among others.

Feuerstein's assumptions about the cognitive deficiencies prevalent among offenders refer to deficits at a more basic cognitive level than are the deficits which are referred to in the cognitive model. Feuerstein's suggestion is that the offender's thinking problems reflect a lack of skill in basic information processing which requires direct remediation. In general he points to deficits in what we have termed the impersonal sphere and recommends a program of

training using impersonal tasks. As noted earlier, the cognitive model makes no assumption about deficits at such basic cognitive levels although it does not deny their possibility. Rather, it stresses deficits in the social sphere and argues that training in interpersonal cognition is required. Interestingly, recent research with Feuerstein's methods have suggested that *Instrumental Enrichment* training is not sufficient to engender cognitive improvement in interpersonal tasks and emphasis has been placed on developing "bridging techniques" which will allow generalization of the effects of training to the social sphere (Griffin, 1982). As yet there is insufficient research on these refinements of *Instrumental Enrichment* to warrant its adoption as a central component in the training aspects of the cognitive model. However, research currently underway with penitentiary inmates may support such inclusion at a later point (Waxman, 1983). At the present time, it is our view that greater gains may be obtained by employing cognitive training methods which are expressly designed to enhance interpersonal cognitive skills.

YOCHELSON & SAMENOW

Based on their research on the thinking errors which they contend typify the "criminal", Yochelson & Samenow (1976; 1977) have described an intervention process which is designed to engender "total change". Their approach first seeks to make the "criminal" see himself as he really is - that is to confront him with the errors and lies which are held to characterize his thinking. He is faced with "disagreeable but accurate statements about himself" in a no holds

barred confrontation. The offender's thinking patterns are "dissected" - probed down to the last detail and their shortcomings carefully and clearly presented to him and "every old thinking pattern is replaced with a new way of thinking". The aim of the confrontation is not only to develop self-understanding, but to foster "self-disgust and a sense of stupidity" which can motivate a choice to change. He is taught with considerable repetition, to develop and practice new thinking and behaviour patterns.

We have elsewhere indicated our misgivings about the validity of Yochelson & Samenow's generalization of the thinking errors of their unusual group of 200 subjects to all "criminals" (Ross & Fabiano, 1981). However, we have noted that they may have provided a valuable service by indicating the cognitive deficiencies of an extreme group of offenders. Similarly, we would suggest that their highly intensive treatment program may be appropriate, even necessary, for such extreme offenders but is likely to be prohibitive both in terms of the time it requires (and its costs) for the majority of offenders who evidence cognitive deficits. The latter, we suggest, could be helped more quickly (and more cheaply) with some of the other programs described in this report. We would not reject Yochelson & Samenow's approach because of its reliance on confrontation. Confrontation may be essential with many offenders to help them realize the shortcomings of their reasoning. We would add that confrontation need not be demeaning; it can be done in a highly supportive manner through the use of dialectical discussion and through present-

ing the offender with intellectual challenges and not mere criticism of his thinking.

MODELLING & ROLE-PLAYING

Research has demonstrated that many offenders are deficient in social perspective-taking. Many of their behaviour problems are a consequence of the fact that they have not developed cognitively beyond an egocentric view of their world. They may lack an ability to take the role of others. They may lack an awareness of other people's thoughts or feelings and, therefore, misread their actions and intentions. Persistent egocentric thinking has been found to be associated with various forms of social deviancy including crime and delinquency (e.g. Chandler, 1973; Spivack, Platt & Shure, 1976).

Accordingly, training in social perspective-taking should be an integral part of cognitive training programs. Such training can best be provided by various *role-playing* experiences in which the offender is involved in assuming the role of others in either in-vivo or simulated conditions. *Role-playing* training refers to a variety of techniques ranging from highly structured sessions in which the client is given a prepared script to follow, to unstructured sessions in which he is given free reign to act out how he imagines other people might behave in various situations. Usually, such training is accompanied by the use of *models* who demonstrate the appropriate role to the client either through live or video-taped presentations. Feed-back may be provided to the client by audio or

Video-taped playback of his *role-playing* and/or through discussions of his performance.

Ollendick & Hersen (1979) have shown the benefits of *modelling* and *role-playing* in teaching incarcerated delinquents alternative and appropriate interpersonal skills. The subjects were instructed in alternative responses to problem situations, observed these behaviours being modelled and role-played the behaviours themselves. This program significantly improved their adjustment. *Role-playing* was also a central component of a program which led to a significant reduction in the arrest records of a group of probationers (as compared to non-trained matched controls) who were required to play the role of judges, jailers, school teachers, victims, gang leaders, militant activists, and innocent bystanders (Ostrom, Steele, & Rosenblood, 1971).

Major improvements in the recidivism of institutionalized adolescent offenders were found by Sarason (1968) in a well controlled study of the effects of *modelling*. In a five-year follow-up, less than half the delinquents in the modelling group (23%) recidivated than in the control group (48%). Positive results were also found by Scopetta (1972) using procedures similar to Sarason including playing of problem-solving skits by paraprofessional members of an institutional staff, role-playing of the situations by subjects who observed the skits, and group discussion. *Role-playing* and *modelling* also assumed a central role in the effective family intervention programs of Alexander & Parsons (1973) and Wade, Morton, Lind & Ferris (1977).

The value of *modelling* is further suggested by the results of Andrews & Kiessling's (1980) series of studies of the effectiveness of probation officers and volunteers in counselling adult probationers. They concluded that the characteristic of an effective correctional worker is that he ...

> "exposes and makes attractive concrete alternatives to crime. This will not be accomplished by simply creating an open, warm, empathic relationship with the probationer, nor by hoping that the client may self-discover the alternatives; but rather, by vividly demonstrating conventional alternatives through words and action, by encouraging the exploration of alternatives through reinforcement of such explorations, and by providing concrete guidance and advice as to how to determine which alternatives are most feasible and attractive" (Andrews, & Kiessling, 1980. p. 462).

Paraprofessional or volunteer workers (typically university undergraduates) have been used in almost every correctional treatment program which has been demonstrated to be effective (Ross & Gendreau, 1980). Their contribution to successful program outcome may be attributable not only to the counselling supervision or other services they provide, but to the fact that they model pro-social means of problem-solving to which their offender-clients may not otherwise have been exposed.

Modelling and *role-playing* can be used not only to teach specific social skills but also to help the offender to recognize that other people may view things differently than he does and to help him understand how others feel and think. However, *modelling* and *role-playing* is usually viewed simply as a means of teaching pro-social behaviours to individuals with

a limited repertoire of such skills. Often the most important behaviour that can be taught through these techniques is a general problem-solving approach to interpersonal problems. When the target behaviour is the cognitive system, the therapist verbalizes coping self-statements or self-instructions, and how he restructures his expectations and beliefs in problem situations. In essence, the therapist models more useful ways for the client to think.

Exposure to problem-solving models was found by Sperr (1973) to increase the self-control of incarcerated delinquents. They also evidenced decreases in carelessness and impulsivity. Stumphauzer (1972) found that exposure to peer models who evidenced the ability to delay their responses, significantly enhanced the self-control ability of institutionalized male offenders. Chandler (1973) in a well designed experimental study found that direct training in *role-taking* substantially reduced delinquents' egocentric thinking and their delinquent behaviour.

We should note that while *role-playing* may be <u>sufficient</u> to promote the offender's social understanding, it is not sufficient to ensure his pro-social action. However, as Hoffman (1975) has noted, role-taking ability may be <u>necessary</u> for the development of empathy and for the promotion of pro-social behaviour:

> "...since a fully developed empathic reaction is an internal response to cues about the affective states of someone else, the empathic reaction must depend heavily on the actor's cognitive sense of the other as distinct from himself

> which undergoes dramatic changes developmentally. The development of a sense of the other ... interacts with the individual's early empathic responses to lay the basis for altruistic motivation" (p.610).

INTERPERSONAL PROBLEM-SOLVING

Reasoning that many offenders may persist in maladaptive behaviours not because of psychopathology but because they simply have not acquired an adequate repertoire of problem-solving skills which would enable them to respond in alternative ways to interpersonal and economic stress, a number of programs have significantly reduced the recidivism of adolescent male and female offenders by utilizing programs specifically designed to teach them *interpersonal problem-solving* skills (Ross & Fabiano, 1981).

What appears to be unique to the *interpersonal problem-solving* approach to therapy is the emphasis on adaptive thinking processes as opposed to an emphasis on internal psychodynamics or on specific overt behaviours per se as major factors in psychological adjustment. Teaching *interpersonal problem-solving* skills is not limited to offering individuals specific solutions to specific problems but rather aims to provide a general coping skill so that the offender may be in a better position to deal more effectively with a wide variety of problem situations. The emphasis is on teaching the cognitive processes by which the individual can develop a general approach to problems, a "learning set which enables the individual to 'create' or 'discover' solutions to a variety of unfamiliar problems" (D'Zurilla & Goldfried, 1971, p.111).

Moreover, *interpersonal problem-solving* training is used toward the goal of providing individuals with a greater capacity to manage their own lives (Carkhuff, 1974; D'Zurilla & Goldfried, 1971; Mahoney, 1977; Spivack, Platt & Shure, 1976).

Interpersonal problem-solving training may be conceived of as self-control training. The major difference between the problem-solving approach and most other forms of teaching self-control is that in *problem-solving* almost the entire procedure is performed without prior awareness of the 'correct' response, whereas in the typical self-control procedure, the response to be manipulated is known in advance. In fact, the major objective in *problem-solving* is to identify the most effective response, after which other self-controlling operations may be employed to stimulate and maintain performance of the selected course of action. It is becoming apparent that the *problem-solving* approach is producing the most promising clinical results (Mahoney & Arnkoff, 1978; Arnkoff & Stewart, 1975; Bluchman, Olson & Hellman, 1976; Coche & Flick, 1975; Jacobson, 1977; Mendonea & Siess, 1976). A number of counsellors have included *problem-solving training* in successful treatment packages (Haley, 1976; Mahoney & Mahoney, 1976).

D'Zurilla & Goldfried (1971) have most clearly articulated the therapeutic relevance and the process of *problem-solving*. They have proposed five general stages of *problem-solving* which require specific training: (general orientation, problem definition and formulation, generating alternatives, decision-making, and verification).

1. General Orientation to Problem-Solving: It has been recognized that an individual's general orientation or "set" in approaching a situation can greatly assist or hinder his/her response to that situation. His "set" functions as a cognitive organizer by providing him with an attitude which makes problem situations meaningful.

Three processes are involved in establishing an effective set: attitude change, stimulus discrimination, and response inhibition. Clients need to actively adopt a coping attitude. Such an attitude recognizes that problem situations are part of everyday existence and that it is possible to cope with most of these situations effectively. The second process, stimulus discrimination, is concerned with facilitating the client's ability to discriminate problem situations by teaching him how to identify external and internal stimuli and label them appropriately in order for his problem-solving activities to be cued. Teaching response inhibition, the final process, involves teaching him to inhibit the tendency either to do nothing or to respond on the first impulse.

2. Problem Definition and Formulation: The second stage of *problem-solving* training focusses on teaching the client how to define problems. Clients are taught to consider all possible bits of information, define all aspects of the situation into concrete terms, identify relevant concepts and rules, and process information in a meaningful way. They are taught how to arrange facts into an orderly form, to discriminate irrelevant facts and to recognize gaps in available information.

3. Generation of Alternatives: The major task in this stage is to teach the client to generate alternative solutions appropriate to any particular problematic situation, and to do so in such a way as to maximize the likelihood that the most effective response will be among those generated. Much of the research in this area of idea production relates to Osborn's (1963) familiar and widely-used method of "brainstorming". The method consists of teaching four rules:

1) withhold judgement while trying to generate alternatives;

2) allow oneself to free wheel in thinking of alternatives;

3) focus on quantity of alternatives and not just their quality;

4) seek as many combinations and/or improvements of the alternatives generated.

D'Zurilla & Goldfried (1971) present a great deal of research which suggests that following these rules facilitates the generation of good alternative solutions to problem situations.

Underlying these brainstorming procedures are two basic principles of idea production, that is, deferment of judgement and "quantity breeds quality" (D'Zurilla & Goldfried, 1971). It is assumed that more effective responses will be generated when one defers evaluation and generates as many alternatives as possible. The individual is instructed to let his imagination "run loose" and to produce an abundance of response associations without concerning himself as to their value, acceptability, or appropriateness. He does not engage in free association, but in "limited-criteria thinking" (Parnes, 1967),

such that his responses are limited to those that are clearly relevant to dealing with the certain problem or situation.

In alternative training, clients can be instructed in the rules of response generation. Opportunities for rehearsal with actual problem situations can be provided in which clients can practice generation strategies. Arnkoff & Stewart (1975) reported that modelling and videotape feedback may facilitate processes such as information gathering in personal problem-solving. The results are congruent with the earlier success reported by Sarason and Ganzer (1973) in the use of modelling to teach problem-solving skills to delinquents. Clients can also be taught to "talk aloud" about their strategy use in order to discover incompatible behaviours (emotional reactions, fixated response patterns, restrictive cognitive rules).

4. Decision Making:

> "An ordinary person almost never approaches a problem systematically and exhaustively unless he has been specifically educated to do so. It is much more natural for him to visualize what is and what ought to be and to focus on the gap between them than to visualize some huge set of alternative possibilities through which he must search" (Miller, Galanter, & Pribram, 1960, p.174).

The fourth stage of *problem-solving* training involves teaching decision-making. The client is taught how to screen the alternative solutions he has generated, evaluate their consequences, select the optimal strategy and specify the behaviours needed to enact that strategy.

5. Verification: The final stage provides an opportunity for problem-solvers to verify their decisions. In teaching the

client how to translate plans into actions, Miller et al., (1960) have proposed a test-operate-test-exit (TOTE) routine. If, after engaging in some cognitive or behavioural operations, the individual "tests" or matches the progress he has made and decides that it is congruent with a standard, he then stops or "exits" from these activities. If, on the other hand, he finds the match to be "incongruent", he continues to "operate" until a successful match is obtained. Thus, the TOTE unit serves as a feedback loop, in which individuals guide and judge their activities.

Teaching self-evaluation is also important in this last stage, and involves three activities: self-monitoring, comparison operations, and self-reinforcement (Bandura, 1977). The client is taught, in effect, how to judge himself and his behaviour realistically and to reward himself appropriately. This training is especially important for helping offenders develop adequate self-esteem.

Training in problem-solving has been an important component of many effective correctional programs. For example, impressive reductions in illegal behaviour were obtained for ten to sixteen year old felons and misdemeanants who were trained in interpersonal and problem-solving skills in either a classroom/lecture format or a counselling arrangement. More than 2,000 male and female delinquents participated in this program. Significantly lower rearrest rates were found for treated delinquents when compared with groups who were referred to the program, but did not receive training: a 24.3% rearrest/reconviction rate for the trained subjects compared to a 50.5% rate for the control group (Collingwood,

Douds, & Williams, 1980). The counsellors in this program were mostly police officers who had been trained in Carkhuff's Human Resource Development Skills training model (Carkhuff, 1971), a human relations training procedure, which focusses on interpersonal problem-solving skills. A program based on this model reduced by 36% the recidivism for boys in the Rhode Island Training School (Carkhuff, 1974). In less stringent research, Carkhuff's problem-solving skills model has been reported to be effective in many other correctional settings (Holder, 1978).

Interpersonal Cognitive Problem-Solving

We suggest that the correctional practitioner considering the use of *problem-solving training* with offenders examine the *Interpersonal Cognitive Problem-Solving* (*ICPS*) programs developed by investigators at the Hahnemann Medical Centre (Platt, Duome, 1981; Platt, Spivack & Swift, 1974).

Spivack, Platt & Shure, (1976) have defined and measured a series of *interpersonal cognitive problem-solving* (*ICPS*) skills which have been found to be essential for successful coping in social situations, and to be deficient in several deviant populations. The skills include:

- sensitivity to interpersonal problems,
- tendency to link cause and effect spontaneously (causal thinking),
- readiness to view possible consequences of actions (consequential thinking),
- ability to generate solutions (alternative thinking),
- ability to conceptualize step-by-step means for reaching specific goals (mean-ends thinking).

Their programs which have been elaborated and tested over several years were developed from various techniques (e.g. D'Zurilla & Goldfried's (1971) five-stage approach to problem-solving, Sarason's (1968) techniques of modelling and group discussions, and Meichenbaum & Cameron's (1973) techniques of self-instructional training). Their program includes a total of 19 teaching units which concentrate on teaching the following skills:

1) Knowing when a problem exists;
2) Defining the problem by putting it into words;
3) Identifying the feeling associated with the problem;
4) Separating facts from opinions;
5) Getting all of the necessary information;
6) Getting alternative solutions;
7) Considering all of the consequences;
8) Deciding and acting on the best choice.

These programs have been used successfully with a wide range of populations such as impulsive adolescents (Spivack & Levine, 1963), adolescent psychiatric patients (Platt, Spivack, Altman, Altman & Peizer, 1974), alcoholics (Intagliata, 1977, 1978), and heroin addicts (Platt, Scura, & Hannon, 1973). Platt, Perry & Metzger (1980) have reported that *ICPS* training was a central component of a program which significantly reduced the recidivism of adult male offenders with a history of heroin dependency who were institutionalized in a correctional institution in New Jersey. During a two year follow-up period, program graduates were found to have a

significantly lower recommitment rate (18%) as compared to untreated controls (30%). The trained groups also improved on a number of other measures (general adjustment, self-evaluation, belief in their personal control, and drug use).

NON-CORRECTIONAL COGNITIVE INTERVENTION PROGRAMS & TECHNIQUES

COGNITIVE RESTRUCTURING THERAPIES

The growing interest in the cognitive factors in criminal behaviour parallels the remarkable upsurge in interest in cognition in the social sciences and the increasing recognition of the importance of cognitive factors in maladaptive behaviours and their treatments. The evidence we have presented of cognitive deficits in offenders and the importance of cognitive training in effective correctional programs suggests that cognitive therapies (e.g. Ellis, 1962; Beck, 1976) may be particularly valuable in correctional intervention. There have been surprisingly few reports of research on the application of such programs with offenders. However, cognitive therapies, it is suggested, hold promise for a wide range of behaviour problems which are evidenced by many offenders and contribute to their criminal behaviour.

Whereas in suggesting cognitive training programs for offenders, we have been emphasizing programs which teach the offender basic socio-cognitive skills, intervention should not be limited to such programs. A comprehensive cognitive program would focus not only on <u>how</u> the offender thinks but also must attend to <u>what</u> he thinks. The offender whose anti-social behaviour is associated with difficulties he experiences in interpersonal functioning may have deficits in his

interpersonal cognitive problem-solving skills, i.e. he may lack the ability to adapt effectively. Other offenders may have adequate ability, but experience difficulties because of specific beliefs and attitudes, that is, what they think may be inappropriate or faulty and result in inappropriate behaviour. In spite of adequate cognitive ability, they may have developed irrational beliefs, cognitive distortions, and destructive self-statements which lead to inappropriate emotional reactions and maladaptive social behaviour. A variety of *cognitive restructuring therapies* may be valuable in assisting the offender to identify and alter such cognitive problems. The common assumption of such therapies is that many emotional and behavioural problems are mediated by the individual's beliefs and attitudes and that these can be modified by various cognitive restructuring techniques.

Rational Emotive Therapy

At least in terms of history and popularity, the *cognitive restructuring therapy* of Ellis (1962) deserves primary consideration. According to the theory behind *rational emotive therapy* (RET), emotional arousal and behaviour are mediated by one's interpretations of situations. There are many irrational beliefs, unrealistic expectations, or false assumptions which people may develop which can become automatic and lead to misperception of events and, thereby, to emotional and behavioural reactions. The therapist helps the clients to identify irrational beliefs, and to formulate arguments to refute these beliefs and thereby reconstrue their world. In addition to discussions about their beliefs, the client may be engaged in

various reconstruction activities in which they study their thoughts about specific situations using videotape, imagery or role-playing. The therapist's strategies for changing his client's irrational beliefs involve *logical persuasion* and *rational disputing* in which the therapist challenges, using logical analysis and humour in an educational process which takes the form of a *Socratic dialogue*.

Rational-emotive therapy was used in the highly successful Crest project in combination with role-playing and other techniques (Lee & Haynes, 1980). Several evaluations of this program have demonstrated that Crest graduates (male and female probationers) committed at least 50% fewer criminal acts than a variety of matched comparison groups and randomly assigned non-trained controls. One study showed that the total acts of misconduct for the Crest group declined by 79% compared with a 4% decline for regular probationers. Another study found that monthly rates of misconduct for 30 delinquents in the Crest group dropped 82%, while the monthly rate for controls on regular probation rose 29%.

A version of *RET* called *Rational Behaviour Training* (Goodman & Maultsby, 1974) was used with male alcoholic recidivistic felons at the Federal Correctional Institute in Lexington and led to a steady decline in the number of discipline reports in the institutions. During a six-month follow-up, only 13.3% of the 80 offenders had problems severe enough to have their parole revoked. Unfortunately, no control group was provided, but the previous records of these offenders

suggested that these results represented a considerable improvement.

Rational Self-Analysis

Goodman & Maultsby's *rational self-analysis* techniques, a derivative of *RET*, may be particularly useful for well-motivated offender clients. It involves teaching the client, through counsellor modelling and reading, how to analyze his own thoughts and teaches him the essential concepts of rational thinking. The client is taught how to actively refute his irrational statements and to substitute more accurate cognitions and is given homework assignments to practice these skills.

Rational Emotive Imagery

Rational emotive imagery (Maultsby & Ellis, 1974; Lazarus, 1977) might also be valuable as a means of making offenders aware of their irrational self-talk. The client is taught to analyze his thinking while imagining various problem situations and to re-evaluate his approach to such situations in more rational terms.

Beck's Cognitive Therapy

Another major cognitive restructuring therapy is *Beck's cognitive therapy* in which the therapist concentrates on distortions of logical thinking, i.e. arbitrary inference, selective abstraction, overgeneralization, magnification (or minimization) and personalization (Beck, 1976). These distortions of thinking are treated by a multitude of cognitive-

behavioural methods including distancing (objective thinking), decentering (reduction in personalization) testing cognitions (distinguishing ideas from facts and checking observations for possible cognitive distractions) and alternative therapy (reconceptualizing unsolvable problems in ways that encourage action and mastery). Moreover, behavioural methods of graded task assignments, homework, and the use of activity schedules provide behavioural data by which clients can test the validity of their assertions and in which cognitive appraisal can occur. *Beck's therapy*, in terms of research, has primarily been associated with the alleviation of depression but it appears to have considerable potential for modifying the inappropriate cognitions which are evidenced by many offenders. Depression, and poor self-esteem of course, are by no means uncommon among offenders and *Beck's cognitive therapy* may have considerable value for them.

COPING SKILLS TRAINING

Whereas cognitive restructuring therapies aim to modify <u>what</u> individuals think, other cognitive programs attempt to teach <u>how</u> to think i.e. they are concerned with teaching coping-skills-cognitions and behaviours which are not situation-specific. *Coping-skills training* (Mahoney & Arnkoff, 1978) is an approach which teaches component skills and integrative capacities which enable the individual to cope with stressful and non-stressful situations. Following Bandura (1969) it is assumed that the acquisition of *coping skills* in humans is probably a complex, centrally-mediated process

involving direct, vicarious and self-stimulating experience.

An example of a treatment program developed from a coping-skills perspective is *stress-innoculation training* (e.g. Meichenbaum, 1977). This program relies on Meichenbaum's self-instructional research and it was stimulated by a coping-skills model (e.g. Goldfried, 1971). Heavy emphasis is given to cognitive training, in the form of *self-instructions*, *imagery* and *rehearsal* to enable the development of generalized skills which can be applied across situations and problems. Training consists of 2 phases. In the first phase the client is provided with a conceptual framework in order to understand the nature of stress. He is shown how his cognitions play an important role in his stress reactions. In phase 2, the client is taught a number of coping skills involving both behavioural and cognitive strategies. He is taught to monitor self-defeating non-coping self-statements and to replace these with self-generated coping self-statements.

Stress-innoculation training has been demonstrated to be effective in the treatment of at least one response which is often a problem for offenders: anger (Novaco, 1975). It may also serve to enhance the offender's self-confidence by teaching him that he is able to control his behaviour and his feelings rather than being controlled by them. Rather than responding with anxiety, feelings of impotence and self-defeating statements when faced with problem situations, the offender can learn to produce self-generated coping statements. The technique may be particularly helpful in countering the negative self-evaluations which many offenders evidence under

conditions of stress. Their negative self-statements often engender negative emotions and maladaptive behaviours.

STRUCTURED LEARNING THERAPY

Cognitive training is frequently involved in those *social skills training* programs which have been popular in the treatment of delinquents and adolescent offenders (Goldstein, Sherman, Gershaw, Speafkin & Gluck, 1978). The underlying assumption of *social skills training* is that behaviour problems are a result of deficiencies in essential social skills (Staub, 1971, Bijou & Ribes-Inesta, 1972). Attempts to correct these deficiencies are made through psychoeducational programs using behaviour modification techniques to teach the offender new social skills which he does not have in his behavioural repertoire or to teach him how to deal with social situations using newly acquired social skills which serve as socially appropriate alternatives to his anti-social behaviours.

Structured Learning Therapy (*SLT*) represents an extention of cognitive modification approaches to social skills training. Recognizing that many offenders do not have the requisite skills in their behavioural repertoire and therefore cannot be reinforced for their performance, *SLT* aims to teach these skills and not merely to reward them (as is more typical in reinforcement therapy programs). This is accomplished primarily through the use of modelling and role-playing. Small groups of trainees with common skill deficits are exposed to modelling tapes and then are aided by two trainers to enact a series of behaviours constituting the modelled skill.

Behavioural rehearsal is followed by feedback on the trainee's effectiveness in executing the skill.

SLT and several other social skills programs (e.g. Echo Glen, 1983) differ from more traditional social skills programs by incorporating procedures to ensure the transfer of training of the skills acquired in the treatment setting to real-life situations. In effect, an attempt is made to teach not just specific skills, but general principles. Trainees are provided with verbal, pictorial and written forms of appropriate information governing skill development, selection, and implementation principles. Transfer is also achieved by the use of overlearning, or the repetition of successful skill enactment (the skill is taught and its behavioural steps modelled, role-played, observed live, written out, and practiced in vivo several times). Transfer of training is also facilitated through the use of identical elements between the *SLT* setting and the setting where the skill is to be applied. Stimulus variability is also arranged by the use of (1) rotation of group leaders across groups; (2) rotation of trainees across groups; (3) having trainees re-role-play a given skill with several co-actors and across several relevant settings and (5) using multiple homework assignments.

Whereas cognitive skills may be acquired through other *social skills training programs*, the training of such skills is often not done either explicitly or directly as it is in the case of *SLT*. A particular group of planning and problem-solving skills are taught in the *SLT* program: examining the causes of interpersonal problems, goal-setting, determining

one's ability to reach that goal, gathering information, decision-making, concentrating on the task.

It is interesting to note that Life Skills programs (Saskatchewan, 1972) which have often been used to improve the essential behavioural repertoire of offenders has also recently "gone cognitive" as increasing recognition has been taken of the fact that thinking skills must be considered to be among the life skills that any individual needs in order to adapt effectively in society (Hearne, 1983; Muller, 1982; Smith, 1982).

SLT has been used with aggressive adolescents to teach social perspective-taking (Trief, 1976), empathy (Berlin, 1976; Guzetta, 1972), effective communication (Jennings, 1975), negotiation skills (Fleming, 1976) and self-control (Hummel, 1977). SLT's success with aggressive adolescents suggests that it may have potential for use with offenders.

META-COGNITION

> Most people do not bother any more about their thinking that they do about their walking or breathing. Thinking seems a natural enough process and one is happy with one's competence (DeBono, 1967, p.7).

Most offenders are thoroughly familiar with interrogation as it is applied by others (police) to their behaviour. There is another form of interrogation with which offenders may be unfamiliar: *self-interrogation*. We suggest that many offenders are totally indifferent to their thinking and that their cognitive functioning could be considerably enhanced if they could be persuaded to make a habit of "thinking about their thinking".

One of the major concerns of cognitive behaviour modifiers has been to help clients gain control of their own thinking by educating them as to the quality of their thoughts and sensitizing them to their "cognitive processes" (Gagne & Briggs, 1974) or "executive processes" (Belmont & Butterfield, 1977). They teach them to interrogate themselves about their thoughts, to examine how they go about solving problems, to analyze the process and not just the products of their thinking, and to distance themselves from their thoughts and their thinking so that they can assess how and how well they are thinking and planning.

Metacognitive development consists of training clients in such processes as checking, planning, asking questions, self-testing and self-monitoring ongoing attempts to solve problems. They are concerned with teaching clients how to learn, how to organize their knowledge, how to be strategic and how to "plan to form a plan".

SELF INSTRUCTIONAL TRAINING

Think-aloud techniques which have been widely applied in work with impulsive and aggressive children (Goodwin & Mahoney, 1975; Camp, Blom, Herbert & VanDoornick, 1977; Furgurson, 1977; Urbain & Kendall, 1980) may have particular value for those offenders whose problem behaviour includes a failure to stop and think before they act. *Self-instructional training* (e.g. Meichenbaum, 1977) using modelling and cognitive rehearsal techniques can be used to teach such offenders how to think before they act - not only to "stop, look and listen" but to identify the problem, ask themselves what are the things

they should do about it, and to continually evaluate, reinforce and correct their thinking and their problem-solving strategies. *Self-instructional training* may help the offender to monitor his own thinking and to develop an internal dialogue which could foster his self-control by teaching him to organize information about problems he faces, to generate alternative solutions and to distinguish between relevant and irrelevant information; in short, to develop effective mediational skills. Such training need not be limited to dealing with specific tasks. On the contrary, offenders could be taught to apply this process to help them to cope in any situation.

A considerable number of studies have indicated the effectiveness of such an approach with impulsive and/or aggressive children (Goodwin & Mahoney, 1975; Camp et al., 1977; Furguson, 1977; Urbain & Kendall, 1980; Urbain & Kendall, 1980 a). The techniques may also be valuable for adolescent and adult offenders.

SELF-MANAGEMENT TRAINING

One aspect of the foregoing which may be particularly relevant for offender clients, is the emphasis on *self-management training*. The aim is to foster self-regulation, self-control, and self-efficacy. Kanfer (1975) has differentiated three stages in teaching *self-regulation* (1) self-observation (the individual learns how his behaviour looks from an observer's viewpoint, (2) self-evaluation (he learns to evaluate his behaviour by means of a realistic standard),

(3) self-reinforcement (he learns to provide himself with a positive (negative) consequence when he has (or has not) met the standard). One of the major advantages of the cognitive intervention for application in correctional settings is the emphasis that is placed on teaching offenders to assume responsibility for their own behaviour. The acquisition of *self-regulation skills* may be of particular benefit to those offenders who believe that their lives are controlled by events, circumstances, and other people rather than by themselves.

> ... just as man may control the behaviour of others by arranging the relevant environmental conditions, so may he control his own behaviour by arranging the same kind of cognitions (Kanfer, 1975, p. 257)

IMAGERY

Cognitive behaviour modifiers have developed a wide variety of specific training techniques which could be included in a comprehensive cognitive training program with offenders (Meichenbaum, 1975, 1977; Lazarus, 1977; Foreyt & Rathjen, 1978; Kanfer & Goldstein, 1980). One technique which merits particular consideration is *imagery*.

Imagery has often been used by cognitive-behaviour therapists as a way of assessing their clients' cognitions - what they are thinking (Meichenbaum, 1972; Meichenbaum & Cameron, 1973; Novaco, 1974; Beck, 1976). It has also been used as an intervention technique, as a means of getting clients to attend to aspects and details of problem situations which they may have overlooked, de-emphasized, or not been

aware of (Selman & Yando, 1980; Lazarus, 1977; Meichenbaum & Cameron, 1973; Galyean, 1983; Murdock, 1980; Osborn, 1957). Teaching offenders to use *imagery* not only might help them develop their abstract reasoning skills (Kohlberg, 1976), it may also foster their acquisitions of creative problem-solving strategies by encouraging them to imagine a greater number of alternative solutions to problems. Teaching an offender to use *imagery* can also serve to help him consider his behaviour, his attitudes, and his values before he actually adopts them. He can be taught to test out possible reactions without commitment. Imagery training can also serve to provide the offender with a safe outlet for anti-social feelings. Although very little research has been conducted on offenders' use of imagery, Selman & Yando's (1980) study of violence in children indicates that imagery training may have merit for correctional intervention. In a study comparing children hospitalized because of violent behaviour and children in the same facility whose problems did not include violence, they found that children with "aggressive disorders" failed to rehearse their actions in fantasy. They argue that aggressive children use their fantasy mode less than do children with no "aggressive disorders", as a means of considering their behaviour. They suggest that if these children could fantasize they would not have to carry out their violent impulses in real life.

Finally we should note that imagery training can be used to help offenders change the content of their thoughts and the effect that they attach to them by associating their

thoughts with positive events and by re-labelling negative experiences and feelings with positive terms (Lazarus, 1977).

> "I wish I could manage to be glad!" the Queen said. "Only I never can remember the rule. You must be very happy, living in this wood, and being glad whenever you like!" "Only it is so very lonely here!" Alice said in a melancholy voice; and, at the thought of her loneliness, two large tears came rolling down her cheeks. "Oh, don't go on like that!" cried the poor Queen, wringing her hands in despair. "Consider what a great girl you are. Consider what a long way you've come today. Consider what o'clock it is. Consider anything, only don't cry!" Alice could not help laughing at this, even in the midst of her tears. "Can you keep from crying by considering things?" she asked. "That's the way it's done", the Queen said with great decision. (Carroll, 1960, p.250).

TEACHING CRITICAL THINKING

A cognitive skill which is essential for effective social adaptation is the ability to appraise and present arguments, i.e. the ability to think and reason critically and rationally. Although there is very little empirical research on this aspect of the cognitive functioning of offenders, there are many observational reports of deficits in critical reasoning among offender populations (e.g. Aver, 1980; LaBar, 1980). Accordingly, we recommend that cognitive programs for offenders include a training component for the development of *critical thinking*. It is assumed that offenders who become skilled at thinking critically will be in a better position to evaluate their own and other's thoughts and actions, understand the consequences of different actions and be able to choose the most rational alternative. Moreover, his acquisition of

critical thinking may help the offender eliminate his irrational and undesirable attitudes and beliefs (D'Angelo, 1971; LaBar, 1980; Coombs, LaBar & Wright, 1982).

It should be pointed out that agreement does not exist as to what exactly constitutes *critical thinking*. Much of what is loosely described under the title of *critical thinking* includes reflective thinking, effective thinking, creative thinking, problem solving, decision making and inquiry learning, (LaBar, 1980). Ennis' (1962) conception of *critical thinking*, and his conception of what constitutes a rational thinker (1979) is the most systematic and comprehensive account of critical thinking abilities currently available. Ennis (1962) defines *critical thinking* as "the correct assessing of statements" which includes:

1) grasping the meaning of a statement;

2) judging whether there is ambiguity in a line of reasoning;

3) judging whether certain statements contradict each other;

4) judging whether a conclusion follows necessarily;

5) judging whether a statement is specific enough;

6) judging whether a statement is actually the application of a certain principle;

7) judging whether an observation statement is reliable;

8) judging whether an inductive conclusion is warranted;

9) judging whether the problem has been identified;

10) judging whether something is an assumption;

11) judging whether a definition is adequate;

12) judging whether a statement made by an alleged authority is acceptable.

Ennis has also described the characteristics of critical thinkers (1979). These include a tendency to:

1) take into account the total situation;

2) be well informed;

3) demand as much precision as the subject matter permits;

4) deal with the parts of a complex situation in an orderly fashion, often one part at a time (but keeping the whole situation in mind when dealing with a part);

5) consider seriously other points of view than their own;

6) withhold judgement when the evidence and/or reasons are sufficient to warrant so doing.

A variety of procedures have been developed for teaching critical thinking. Most take the form of the creative discovery (Ennis, 1979; LaBar, 1980; D'Angelo, 1971), double-dare-you-method (D'Angelo, 1971; Ennis, 1956; Mehl, 1956), question method (Ennis, 1956) and the student challenge method (Marksberry, 1965; Ennis, 1956; Shotka, 1960; D'Angelo, 1971; LaBar, 1980.

It should not be assumed that the task of teaching *critical thinking* is completed merely by exposing individuals to the techniques of critical thinking. The ability to think critically is distinct from the disposition to do so. Individuals must have the disposition to apply the techniques of *critical thinking* in their everyday lives. However, there are certain things one can do to facilitate this process. Providing individuals with a supportive classroom atmosphere in

which open dialogue questioning and discussion is encouraged will help, as will the use of open-ended questions which give individuals the opportunity to generate hypotheses and to offer reasons and conclusions. This is especially important if one accepts the claim that *critical thinking* "means the control of emotions, the curbing of impulsiveness; ... recognition of cause and effect ... problem-solving ... the making of choices" (DeZafra, 1957, p.231).

DeBONO'S LATERAL THINKING

A technique which appears not to have been applied to offenders but may have particular value for them is DeBono's (1967, 1971, 1977) widely popular *lateral thinking program* DeBono has suggested that many individuals have been so exposed through educational experiences to logical sequential thinking that they are caught in a "prison of old ideas" - they are unable to generate new ideas because they need to be right at every step. DeBono suggests that such restricted forms of thinking curtail creative problem-solving:

> "Most people's thinking is like rainwater that hits the ground and is immediately drained off by rivers before it can soak in anywhere". ... "We all have channels cut into our minds, automatic ways of thinking about things. What I've tried to do is dam up the rivers and see where else the water might profitably flow" (DeBono, 1981, p. 10).

He has developed a set of training techniques for the enhancement of what he calls "*lateral thinking*" which he describes as generative or creative thinking which enables the individual to restructure the way he looks at a problem situation or an

intellectual task. *Lateral thinking*, it is suggested, is useful for problem-solving since it enables the generation of new ideas in contrast to more conventional thinking which tends to inhibit the production of innovation by the dependence on fixed, concept patterns.

Although there is a surprising lack of research on the creative thinking ability of offenders, it is one of the assumptions of the cognitive model that many are lacking in the ability to conceptualize alternative solutions to interpersonal problems and tend to be somewhat rigid in cognitive functioning (Ross, 1983). Accordingly, it may well be profitable to examine the effects on offenders of DeBono's techniques for training *lateral thinking*.

TEACHING PHILOSOPHY IN SHOOLS

Concern about the apparent deterioration in cognitive skills among students has led to a rapidly accelerating number of courses on reasoning being offered in elementary, high schools, and universities throughout North America and to a general re-awakening of interest among educators about the necessity of teaching "thinking" in schools. This movement represents in part, a response to National Assessment of Educational Progress Research in the U.S. which showed major declines in problem-solving ability among students during the 1970's and other reports attesting to the fact that many students go through school without ever developing basic cognitive skills such as analyzing, synthesizing, and generalizing. Other research has noted a deterioration in the

inferential reasoning ability of students in reading and in problem-solving in math.

In response to these problems, schools and colleges have adopted a number of courses on "critical thinking". Many of these have been made obligatory at the high school or college level. Increasing emphasis is also being placed on infusing existing courses on various subjects with specific training on "reasoning". Many of the program efforts consist of intensive teaching in "critical reasoning" but a variety of other courses are also being introduced including Instrumental Enrichment (Feuerstein, 1980), and Lateral Thinking (DeBono, 1971; 1977). Educational Television networks are presenting specially developed programs for training reasoning, analytical skills, logic, communication, and problem-solving to children in grades as low as five to six.

Philosophy For Children

One program which is being widely used is *Philosophy for Children* which, using a combination of readings (novels) and guided discussions, seeks to teach thinking skills to children, specifically the generation of ideas and critical reasoning (formal and informal logic) (Lipman, Sharp, & Oscanyan, 1980). One of the novels is set within a classroom of children who begin to think about thinking and in the process discover the principles of reasoning. They also discover that they can apply their thinking effectively to situations in real life. The story points to the value of inquiry, and encourages the development of alternative modes of thought and imagination.

Another story is concerned with the interrelationship of logic and morality. The story is about children struggling to develop techniques of reasoning that will enable them to defend their moral views.

Many schools and colleges have begun to re-emphasize the value of writing as a means of fostering the development of students' thinking skills. Rather than accepting the continuation of the trend toward a decrease in the number of essays students are required to write, many schools are demanding that students write more essays because of their value in teaching the writer to organize his thoughts, and communicate them clearly.

School-based programs such as the foregoing appear not to have been used extensively in correctional educational programs. They should be. An appropriate concern for adult material and methods of presentation should, of course, be applied. However, many of the materials which are being used in these courses have sufficient breadth of interest that they provide a valuable pool of techniques and approaches which the correctional teacher could adapt to his particular correctional population.

MORAL DEVELOPMENT/VALUES EDUCATION PROGRAMS

It should be noted that school-based "philosophy" programs often combine the teaching of thinking or reasoning and the teaching of values. The latter has been touted as a means of delinquency prevention and offender rehabilitation. The view that the criminal behaviour of offenders reflects deficits in their moral reasoning has long been popular

(e.g. Scharf, 1980; Scharf & Hickey, 1976; Kohlberg, 1969; Piaget, 1970; Duguid, 1981; Parlett, 1980).

At first glance such a view would seem to be in accord with the cognitive model. If by moral reasoning ability one means one's ability to reason about moral issues, then it would seem to follow that offenders who are lacking in reasoning ability would, ipso facto, evidence impairment in moral reasoning. However, as we have noted, the cognitive model holds that many offenders have deficits not in their general reasoning ability (some may well have) but in their interpersonal reasoning. It is possible that an offender may have a highly developed critical reasoning ability and that he can reason impressively on moral issues but be severely handicapped in his ability to understand the nuances of interpersonal relations and have severe deficits in his interpersonal problem-solving skills.

The research on which the cognitive model is based is research on the relationship between interpersonal reasoning and criminal behaviour. Research on the relationship between moral reasoning and crime is inconclusive (Blasi, 1980; Ross & Fabiano, 1981). It has not been demonstrated that a moral reasoning deficit is either a necessary or a sufficient cause of criminal behaviour. Many offenders have a well developed ability to reason about moral issues but choose to ignore a moral stance when considering criminal acts (Blasi, 1980). Many non-offenders have a very primitive value system but one which controls their behaviour very effectively. It also should be noted that the relationship between moral reasoning

and moral action is unclear. As Bandura (1961) noted, some of the most severe criminal acts of violence are justified with excessively high moral rationales.

There is considerable controversy about the adequacy of theories of moral development, about the validity of measures of moral reasoning, about the relationship between moral reasoning ability and one's values, and about the relationship between moral reasoning and moral behaviour (Blasi, 1980; Jurkovic, 1980; Ross & Fabiano, 1981). Finally, major doubts have been raised about the ability of *moral development* or *values education training* to engender improvement either in the student's values or in their moral behaviour (Fraenkel, 1980). Accordingly, we are less than sanguine about the ability of *values education programs* or *moral development training* to achieve the goals that are usually set for them - either enhancement of values or reductions in anti-social behaviour. However, we are somewhat optimistic that such programs may achieve a different goal - by their discussion of moral dilemmas in human interactions such programs may foster the development of social perspective-taking. They may help the student to recognize, understand and appreciate that social interactions are complex and that different people may have widely differing views on issues from their own. In effect, the programs may foster the development of social perspective-taking. They may not modify one's moral values or one's actions but they may sensitize them to the views of other people - they may teach empathic understanding. It is our view that other programs presented in this report provide more

direct and more effective means whereby such a goal may be achieved with offenders and that these programs are also more likely to be palatable to offenders.

QUALITY CONTROL

The bulk of this report has dealt with intervention techniques. It is fitting to end the report with a word about intervention agents. Although there is a dearth of research on the characteristics of the most effective cognitive trainer we consider it to be axiomatic that the effectiveness of any cognitive program will be determined in large measure by the quality of the trainer. Whereas we cannot argue from any empirical base that an effective trainer should have the same characteristics as an effective psychotherapist (e.g. the ability to portray empathic understanding, warmth and unconditional positive regard), we assume that a cognitive trainer must have the requisite skills to develop what Egan (1975) has called an adequate "influence base" with offender clients such that he/she can motivate the offender to collaborate with him/her in exploring his/her cognitive functioning. It would seem reasonable to suggest that an adequate trainer must have enough empathic ability (and motivation) to understand what his client thinks and feels, i.e. he can see the client's world from his client's frame of reference. As important, he must be able to model effective reasoning and problem-solving, i.e. to model that which he hopes the offender to achieve. This requires that he personally have a

substantial repertoire of socio-cognitive skills and that he can communicate these skills concretely and clearly. He must also be adequately trained so that he can be sensitive to discrepancies, distortions and other thinking errors which the offender may evidence, and he must be able to challenge these in a confrontative though supportive way.

We would add that he must be willing to adopt an eclectic approach to intervention and not be enamoured so much with one approach or point of view that he is reluctant to try alternative approaches, i.e. he must be able to demonstrate the creative problem-solving approach that he hopes his client will eventually develop.

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